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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,164	11/19/2003	Thomas Joseph Maskell	MASKELL-TJ1	6757

7590

04/07/2005

Thomas Joseph Maskell
2585 Spitler Road
Poland, OH 19103

EXAMINER

KASTLER, SCOTT R

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,164

Applicant(s)

MASKELL, THOMAS JOSEPH

Examiner

Scott Kastler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/19/03 12/15/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

Means-Plus-Function language in the Claims

The instant claims (claims 1 and 11) contain the means-plus-function term “means for conducting an electric current on the surface of said refractory core”, however, the specification does not define this term with the required specificity to meet means-plus-function requirements, and therefore, any means which is able to conduct current on the surface of the refractory core has been interpreted to meet this requirement.

Claim Objections

Claims 9, 10, 19 and 20 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The above claims do not fairly further limit the independent apparatus claims from which they depend because with respect to claims 9 and 19, absent any positive demonstration of a structural difference arising therefrom, the manner in which an apparatus is produced cannot be relied upon to fairly further limit claims to the apparatus itself. See MPEP 2114 and 2115. With respect to claims 10 and 20, since the coating of article or stopper is already electrically conductive as required by independent claims 1 and 11, they are already inherently capable of making electrical contact with another electrically charged element and therefore, claims 10 and 20, which do not recite any structure, but only that the coating be capable of making electrical contact. Do not fairly further limit independent claims 1 or 11.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Rickborn et al.

Rickborn et al teaches a refractory particle or group of particles, which may be formed of either metal oxides or carbides or a mixture including carbon (see col. 3 lines 30-49 for example) are coated with an electrically conductive coating made of carbon (see col. 3 line 63 to col. 4 line 13 for example) thereby showing all aspects of the above claims, since the term “article” is sufficiently broad enough to be fully met by the particles (which are in the form of manufactured spheres for example) of Rickborn et al.

Claims 1, 2 and 5-10 are rejected under 35 U.S.C. 102(b) as being anticipated by LaBate.

LaBate teaches a refractory article including a coating of graphite (defined by the instant specification as an electrically conductive coating) thereon (see col. 1 lines 42-53 for example) where the refractory is composed of ceramic oxides (see col. 2 lines 43-60 for example) thereby showing all aspects of the above claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

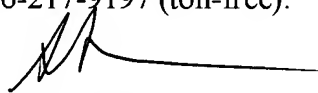
Claims 3, 4 and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaBate in view of the admitted prior art of the instant disclosure . As applied to claim 1 above, LaBate teaches that it was known in the art at the time the invention was made to coat refractory articles employed in molten metal operations, including the casting and dispensing of molten metals with a graphite coating in order to reduce flaking or parting of the refractory when subjected to molten metal (see col. 1 lines 45-50 for example), thereby showing all aspects of the above claims except the specific employment of the disclosed graphite coating on a stopper rod, or the production of the stopper rod out of a refractory made of or including metallic carbides and/or graphite. The admitted prior art of the instant disclosure, on pages 1-4 for example, teaches that stopper rods used in molten metal casting or dispensing were known to be made of a refractory including metallic carbides and/or graphite at the time the invention was made. Because LaBate is specifically directed to protection of refractory products to be employed in molten metal dispensing/casting operations, motivation to include the graphite (electrically conductive) coating of LaBate, on a stopper rod made of either a metallic carbide or a mixture of metallic oxides, carbides and carbon as taught by the admitted prior art of the instant disclosure, in order to reduce flaking and separation of the refractory, as taught by LaBate, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Scott Kastler
Primary Examiner
Art Unit 1742

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